

ABSTRACT

Production of structured hard chrome layers

A method of producing a structured hard chrome layer is described, wherein chromium is deposited from an electrolyte onto a workpiece, said electrolyte containing:

- (a) a Cr (VI) compound in an amount corresponding to 50 g/l to 600 g/l of chromic acid anhydride
- (b) 0.5 g/l to 10 g/l of sulphuric acid;
- (c) 1 g/l to 20 g/l of aliphatic sulphonic acid, comprising 1 to 6 carbon atoms, and
- (d) 10 g/l to 200 g/l of at least one compound forming a dense cathode film, said compound being selected from among ammonium molybdate, alkali molybdate and alkaline earth molybdate, ammonium vanadate, alkali vanadate and alkaline earth vanadate, ammonium zirconate, alkali zirconate and alkaline earth zirconate.

Further, the application relates to a structured hard chrome layer obtained according to said method and to an electrolyte for carrying out said method.

(Fig. 2)

